# **Product datasheet**

Specifications





## servo motor BCH, Lexium 28, 80mm, 750W, 1.59kg.cmÂ<sup>2</sup>, without oil seal, with key, brake, leads connection

BCH2HF0731CF5C

() Discontinued

() Discontinued on: Aug 27, 2020

(!) End-of-service on: Jul 28, 2023

### Main

Range compatibility	Lexium 28
Device short name	BCH2
Product or component type	Servo motor

### Complementary

Complementary		
Maximum mechanical speed	5000 rpm	
[Us] rated supply voltage	220 V 110 V	
Network number of phases	Three phase Single phase	
Continuous stall current	4.01 A	
Continuous stall torque	2.39 N.m for LXM28 at 4.5 A, 220 V, single phase 2.39 N.m for LXM28 at 4.5 A, 220 V, three phase 2.39 N.m for LXM28 at 9 A, 110 V, single phase	
Continuous power	750 W	
Peak stall torque	7.16 N.m for LXM28 at 4.5 A, 220 V, single phase 7.16 N.m for LXM28 at 4.5 A, 220 V, three phase 7.16 N.m for LXM28 at 9 A, 110 V, single phase	
Nominal output power	750 W for LXM28 at 4.5 A, 220 V, single phase 750 W for LXM28 at 4.5 A, 220 V, three phase 750 W for LXM28 at 9 A, 110 V, single phase	
Nominal torque	2.39 N.m for LXM28 at 4.5 A, 220 V, single phase 2.39 N.m for LXM28 at 4.5 A, 220 V, three phase 2.39 N.m for LXM28 at 9 A, 110 V, single phase	
Nominal speed	3000 rpm for LXM28 at 4.5 A, 220 V, single phase 3000 rpm for LXM28 at 4.5 A, 220 V, three phase 3000 rpm for LXM28 at 9 A, 110 V, single phase	
Maximum current Irms	13.23 A for LXM28 at 0.75 kW, 220 V 13.23 A for LXM28 at 0.75 kW, 110 V	
Maximum permanent current	4.29 A	
Product compatibility	LXM28 servo drive motor at 0.75 kW, 220 V, single phase LXM28 servo drive motor at 0.75 kW, 220 V, three phase LXM28 servo drive motor at 0.75 kW, 110 V, single phase	
Shaft end	Keyed	
Shaft diameter	19 mm	
Shaft length	35 mm	

Key width	6 mm
Feedback type	20 bits single turn absolute encoder
Holding brake	With
Holding torque	2.5 N.m built-in
mounting support	Asian standard flange
Motor flange size	80 mm
Electrical connection	Free lead
Torque constant	0.6 N.m/A at 20 °C
Back emf constant	36 V/krpm at 20 °C
Rotor inertia	1.59 kg.cm <sup>2</sup>
Stator resistance	1.5 Ohm at 20 °C
Stator inductance	6.1 mH at 20 °C
Stator electrical time constant	4.07 ms at 20 °C
Maximum radial force Fr	332 N at 3000 rpm
Maximum axial force Fa	115 N
Brake pull-in power	10.2 W
Type of cooling	Natural convection
Length	178 mm
Number of motor stacks	2
Centring collar diameter	70 mm
Centring collar depth	4 mm
Number of mounting holes	4
Mounting holes diameter	6.6 mm
Circle diameter of the mounting holes	90 mm
Distance shaft shoulder-flange	4 mm
Net weight	3.7 kg

## Environment

IP degree of protection	IP54 IM B5, IM V1 IP50 IM V3
Ambient air temperature for operation	040 °C

## **Packing Units**

V	
Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	13.8 cm
Package 1 Width	17.5 cm
Package 1 Length	29.6 cm
Package 1 Weight	4.21 kg

## Sustainability Screen Premium

**Green Premium<sup>TM</sup> label** is Schneider Electric's commitment to delivering products with best-inclass environmental performance. Green Premium promises compliance with the latest regulations, transparency on environmental impacts, as well as circular and low-CO<sub>2</sub> products.

**Guide to assessing product sustainability** is a white paper that clarifies global eco-label standards and how to interpret environmental declarations.

Learn more about Green Premium >

Guide to assess a product's sustainability >



Transparency RoHS/REACh

## Well-being performance

Reach Free Of Svhc
Mercury Free
Rohs Exemption Information Yes
Pvc Free

### **Certifications & Standards**

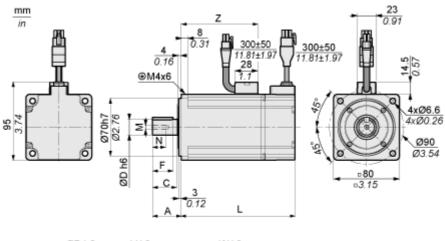
Eu Rohs Directive	Pro-active compliance (Product out of EU RoHS legal scope)	
China Rohs Regulation	China RoHS declaration	
Environmental Disclosure	Product Environmental Profile	
Weee	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins	
Circularity Profile	End of Life Information	

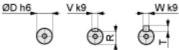
## Product datasheet

### **Dimensions Drawings**

#### Dimensions

#### **Dimensions of Motor**

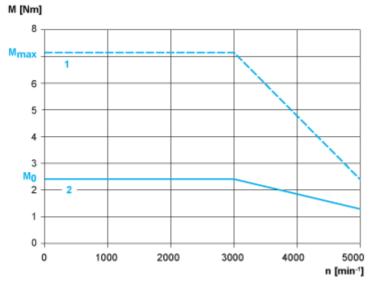




	mm	in.
L (without holding brake)	138	5.43
L (with holding brake)	178	7.01
A	35	1.38
с	29.5	1.16
D	19	0.75
F	25	0.98
R	15.5	0.61
Т	6	0.24
V	6	0.24
w	6	0.24
Z	93	3.66

### Performance Curves

### Torque/Speed Curves with 230 V Single/Three Phase Supply Voltage



Servo Motor with LXM28AU04 ••• Servo Drive

- 1: Peak torque
- 2: Continuous torque